DRY CREEK BRIDGE Mount Rainier National Park Spanning Deadwood Creek on Yakima Park Highway Longmire Vicinity Pierce County Washington HARR No. WA-49

HAER WASH 27-LONGY 6-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

DRY CREEK BRIDGE Mount Rainier National Park HAER WA-49

HAER WASH 27-LONG V,

I. INTRODUCTION

Location:

Spanning Deadwood Creek on Yakima Park Highway, .7 mi. SW of Mather Memorial Highway, Mount Rainier National

Park, Pierce County, Washington. Quad: White River Park, Wash.

UTM: 10/611075/5195700

Date of Construction:

1929

Structure type:

Reinforced concrete slab bridge on masonry abutments

FHwA Structure No.:

N/A

Designer:

Western Regional Office, Bureau of Public Roads, San

Francisco, California

Contractor:

A. C. Goerig, Seattle, Washington

Owner:

Mount Rainier National Park, National Park Service

Use:

Park highway bridge

Significance:

One of the shortest spans in Mount Rainier National Park, this simple reinforced concrete slab bridge features masonry abutments and a masonry guard rail in the characteristic "rustic style" widely employed by the National Park Service.

Project Information:

Documentation of the Dry Creek Bridge is part of the Mount Rainier National Park Roads and Bridges Recording Project, conducted in summer 1992 by the Historic American Engineering Record.

Richard H. Quin, Historian, 1992

II. HISTORY

This is one in a series of reports prepared for the Mount Rainier National Park Roads and Bridges Recording Project. HAER No. WA-35, MOUNT RAINIER NATIONAL PARK ROADS AND BRIDGES, contains an overview history of the park roads. In addition, HAER No. WA-126, YAKIMA PARK HIGHWAY, contains more specific information on the road on which the Dry Creek Bridge is located.

Yakima Park Highway

The Yakima Park Highway, built between 1927 and 1931, replaced the old White River Road to Glacier Basin built by mining interests in the 1910s, and continued up the northeast shoulder of Mount Rainier to the high subalpine meadows at Yakima Park (Sunrise). The road was surveyed and constructed under the supervision of the Bureau of Public Roads (BPR), which in 1925 assumed responsibility for major road projects in the national parks.

The 15.5-mile Yakima Park Highway leaves the Mather Memorial Parkway [HAER No. WA-125] at the "White River Wye," 5 miles south of the northeast park entrance. The road runs southwest for 4 miles, crossing rustic style bridges at Dry (Deadwood) Creek and Klickitat Creek [HAER No. WA-50] and a plain steel girder and reinforced concrete replacement span over Shaw Creek. The road then makes a looping curve to cross the Fryingpan Creek Bridge [HAER No. WA-54] and swings northwest another mile to the White River crossing [HAER No. WA-53]. From this point, a graveled road provides access to the White River Campground and the Glacier Basin trail. The main road begins to climb a series of switchbacks to Sunrise Point, where it makes a final swing to the west to reach the Sunrise development at Yakima Park. Sunrise is the highest point (elev. 6,450') reached by the park road system.

Dry Creek Bridge

The "Dry Creek Bridge" on the Yakima Park Highway actually crosses Deadwood Creek, a perennial stream which rises on the west flank of the Cascade crest and flows generally northwest to a confluence with the White River. Construction of the bridge was part of the late 1920s realignment of the lower White River Road and extension of the road to Yakima Park (Sunrise).

The bridge was designed at the San Francisco Regional Office of the Bureau of Public Roads (BPR), an agency of the U.S. Department of Agriculture. With the signing of a Memorandum of Agreement with the National Park Service in July 1926, the BPR assumed responsibility for major road and road reconstruction projects in all the national parks. Within a short time, the BPR was assigned to survey and build the new White River Road (then called the Yakima Park Highway) in Mount Rainier National Park. This road required a new bridge across Deadwood Creek, which the engineers called "Dry Creek," probably because it was dry at the time. Final plans for the structure were produced at the San Francisco office in April 1929.

The bridge was constructed under the grading contract for the 1.4-mile section of the Yakima Park Highway between what was then the park's eastern boundary and the Naches Pass Highway (later, Mather Memorial Highway.) The contractor for the project was A. C. Goerig of Seattle, Washington, who also had contracts for clearing and grading work on another upper section of the road. Work at the site began in the summer of 1929.

In his August 1929 monthly report, Park Superintendent O. A. Tomlinson noted that the bridge was 50 percent complete. Goerig finished the contract in October 1929. All work on the new highway was completed in 1931, and the road opened to public travel on 15 July of that year.

DRY CREEK BRIDGE HAER No. WA-49 (page 3)

Description

The Dry Creek Bridge is a simple reinforced concrete slab bridge resting on battered masonry abutments. The bridge is only 24' long, although its masonry guard rails extend for another 17' to the west and 23' to the east. The bridge spans the stream on a single 20' span. The deck is a 1' 7" thick Class "A" concrete slab reinforced by 1" diameter longitudinal deformed steel bars on 6" centers with ½" diameter transverse bars on 2' centers. The deck is covered with a concrete and asphalt wearing surface 6" thick. Concrete curbs 9" square were poured monolithically with the slab. The bridge rests on solid masonry abutments 9' thick at the base and constructed with an inside batter of 1:12 and outside batter of 4:12. The seal between the deck and slab consists of three layers of tarpaper and 1" of grout. The masonry guard walls rise 2'8" on the south or upper side and 2"11" on the north side. The bridge is built on a 4.25 percent grade rising from west to east and is superelevated 1'6" over its 24' roadway width. The structure is constructed on a very slight 8° curve with the face of rails and the abutments parallel to the roadway.

III. ENDNOTES

- 1. U.S. Department of Agriculture, Bureau of Public Roads, Western Regional Office, San Francisco, "Dry Creek Bridge, White River Road, Mount Rainier National Park, Project 3-A-2," Construction drawing RG 151, one sheet, April 1928.
- 2. O. A. Tomlinson, Superintendent, Mount Rainier National Park, Superintendent's Monthly Report, August 1929, 6; Superintendent's Monthly Report, October 1929, 5. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.

IV. BIBLIOGRAPHY

- Tomlinson, O. A., Superintendent, Mount Rainier National Park.

 Superintendent's Monthly Report, August 1929. MORA Archives, Box H2615,

 Superintendents' Monthly Reports 1928-1931 file.
 - --Superintendent's Monthly Report, October 1929. MORA Archives, Box H2615, Superintendents' Monthly Reports 1928-1931 file.
- U.S. Department of Agriculture, Bureau of Public Roads, Western Regional Office, San Francisco, CA. "Dry Creek Bridge, White River Road, Mount Rainier National Park, Project 3-A-2." Construction drawing RG 151, one sheet, April 1928.